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MASTER OF MILITARY STUDIES

HELICOPTERS: THE PLATFORM OF CHOICE FOR DEFENSE AND DEVELOPMENT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF MILITARY STUDIES

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Executive Summary

HELICOPTERS: THE PLATFORM OF CHOICE FOR DEFENSE AND DEVELOPMENT

By LCDR Addison G. Daniel, United States Navy

Thesis: The air mobility attributes of helicopters are the most meaningful aviation-means of distributing all facets of defense and development initiatives at the tactical level in order to quell illicit networks in the places where they thrive.

Discussion: Insurgents use strongholds in waning states to train members and mastermind attacks against the U.S. and its allies in direct threat to the National Security Strategy. This study highlights the susceptibility of poorly governed states to be exploited by criminal organizations and how aviation supports the overall U.S. FID effort by facilitating the IDAD tasks of balanced development, security, neutralization, and mobilization. In order to prevent instability inside a Host Nation (HN), it is important to build cohesive IDAD and FID strategies that promote growth and address the underlying causes of fragility, but also underscore the proper government's legitimacy. More specifically, this monologue draws upon historical reference to show how helicopters are the most meaningful assets when it comes to defense and development efforts.

Conclusion: Airpower's proper role in confronting illicit organizations is similar to the tactics for counter-insurgency and is defined mainly by its support functions. Of particular importance is its ability to increase mobility for defense and development initiatives. The missions of air mobility provide the HN with flexibility, initiative, and surprise. These are attributes that normally favor the insurgency. Furthermore, helicopters are best suited to fulfill this role and allow the HN to quickly extend its influence to remote regions of the country and carry out development, security, neutralization, and mobilization tasks of the HN IDAD.

It is important to note that vertical lift is vital to defense and development operations. Considering the breadth of its mission capabilities (CSAR, Air Assault, HADR, NEO, Logistics, MEDEVAC, ISR, PSYOPS, and IO to name a few), helicopters offer a relatively cheap alternative to fixed wing counterparts when considering the decentralized infrastructure demands of the unstable environment and specialized roles of airplanes. The helicopter can be used as a gunship, as well as a vertical lift platform for battlefield mobility. It can quickly respond to other catastrophic events for NEO and HADR. It can reach areas that traditional airplanes cannot and requires a smaller operating footprint at those locations. Helicopters also provide vital public infrastructure such as medical airlift, real time intelligence and news, and movement of key infrastructure professionals like teachers, architects, and government officials. These capabilities in the construct of IDAD and FID oftentimes mean the difference between success and failure. In order to fulfill these requirements, SOCOM needs a Joint AvFID Wing that is organized under the Joint Special Operations Command (JSOC).

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Preface

This project began as a review of Plan Colombia in hopes to transplant lessons learned from Central and South America to other regions of the world, particularly PACOM. But, as I studied Foreign Internal Defense (FID) I realized the futility in looking for a template that could be relocated to other parts of the world. As a naval aviator, I was naturally drawn to Aviation FID (AvFID) but the more I researched, the more I became frustrated with the laissez faire approach of those in power. For them, a lot of the in-fighting seems focused around two aspects, does the Air Force need an Irregular Warfare capability and the types of aircraft required in order to be relevant. The 6 Special Operations Squadron (SOS) wants light/medium STOL-type aircraft Pilatus PC-6 and C-12, but Air Force procurement centers on strike and strategic lift type aircraft, F-22s, V-22 Ospreys, C-130s, or C-17s.

My experience flying helicopters in the Navy of course makes me biased, but I am also convinced by it that helicopters are the asset of choice at least at the tactical level. HADR in Haiti, the emphasis of air assault by the Army 101st, SOF support by the 160th SOAR in Iraq and Afghanistan, and the helicopter centric design of the Air Combat Element of the Marine Expeditionary Unit are all examples of its functionality and relevancy. I am not naïve enough to say that helicopters are the only aircraft for FID, but it is not being considered seriously by any of the parties involved. The excuse is that these systems are too complex and expensive for use in third-world countries. In trying to take a more tangible counter argument, I looked for operating cost comparisons. Most of the data I came across was derived from the H-53 (arguably the oldest, biggest, and most cost-prohibitive platform of this type) compared to STOL-capable 4-9 passenger fixed wing propeller driven aircraft. A comparison like this is hardly apples-to-apples, or even apples-to-oranges, but more like whales-to-minnows.

Eventually, it occurred to me that an incomparable cost-driven approach was not the best way to make an argument for helicopters in FID. Instead the argument must be defined in terms of aviation's role in counterinsurgency—air mobility. Finally in October 2012, while working on this paper, the 1st Special Operations Wing at Hurlburt Field absorbed the 6 SOS. As part of this transition, the rotary wing portion of Air Force FID was terminated making this argument either more relevant than ever or "a day late and a dollar short."

I am thankful to several people who enabled this accomplishment. To LtCol Tlapa, thank you for your direction throughout the academic year. Your warnings about work-life balance were spot on. I am also grateful to LTC Lewis for expanding my perspective during the electives period. Without exposure to your courses I would have had a difficult time putting doctrine into historical context and making most of the connections used for this paper.

Additionally, I am indebted to Dr. Gelpi for advising me throughout this process. I would never have found my niche without your counseling. My sincerest appreciation goes to my dad, sisters, friends, and editors at the writing center who reviewed my material and offered advice for improvements.

Finally, I owe a tremendous amount of gratitude to my family who did not accompany me on this tour. In many ways, this has been the most challenging year ever. For my absences, both mental and physical, I am sorry. Your undying love and support is cherished and for you all, I am —always and forever—most grateful.

Introduction

The Liberation Tigers of Tamil Elam (LTTE) in Sri Lanka following British decolonization, the Taliban in Afghanistan following Soviet withdraw, Al Qaeda and the Islamic Jihad of Yemen, and Islamic forces of Al Qaeda in the Islamic Maghreb (AQIM) aligned with Malian Islamist group Ansa Dine in Mali are all examples of terrorist groups finding sanctuary in deteriorating states. If allowed to flourish these organizations entrench themselves in poorly governed places and their violent activities spread to other countries as was demonstrated by the attacks on America 11 September 2001.

Compounding the problem of insurgents creating these strongholds to recruit and mastermind attacks, the Joint Interagency Counter-Trafficking Center in Europe links terrorism to narcotics stressing that the same gaps in security and stability that allow terrorist networks to exist may also be used to traffic drugs, weapons—including weapons of mass destruction, and people. ¹ It is because of this connection that the United States is taking an active role in countering, not just terrorism, but also transnational criminal threats through inter-government cooperation.

Due to the connection between trafficking, terrorism, and poorly governed nations, the U.S. has an interest in deterring illicit organizations from targeting feeble countries. By improving a nation's legitimacy and security, the United States can interdict networks where they begin and in theory disrupt their ability to project power. Foreign Internal Defense (FID) is one part of American strategy to bolster Host Nation (HN) security. Together, with a program of Internal Defense and Development (IDAD), the U.S. and HN can work together to employ a "whole of government(s)" approach that facilitates a more stable and lasting environment. ² Diplomats, Non-Government Organizations (NGOs), human rights groups, and military

commanders concerned with piracy, narcotics, trafficking, human suffering, contingency operations, and insurgency can use FID programs as a force multiplier. In that regard, FID programs promise increased American global outreach while requiring minimum American force in an ever-tightening budgetary environment. ³ Additionally, FID encourages weaker states to take an active and predominant role in their own governance.

Host Nation IDAD and American FID are ways of quelling these illicit networks in the places where they thrive. At the tactical level, helicopters are the most meaningful aviation-means of achieving that end. Helicopters allow the HN to effectively strengthen its environment by extending government influence to remote regions of the country and can be utilized to carry out core tasks across the functions of the IDAD strategy. It is the air mobility effects of helicopters that are their key attributes.

This premise that helicopters are the essential defense and development platform begins by first showing the problem within the context of U.S. national security. Next will be a description of how American FID augments IDAD programs in a strategy designed to build and stabilize states witnessing illicit and insurgent activity. The paper then highlights AvFID and its role in combating illicit networks as well as building aviation infrastructure. Finally, using historical references, the paper will show how the helicopter has strengthened counterinsurgency capabilities and enhanced the HN's ability to project legitimacy under an umbrella of security.

Background

Since the beginning of the Global War on Terror, the strategic documents of the United States call attention to the vulnerability of poorly governed regions and stress that instability in these territories is a clear and present danger to U.S. national security. The National Military Strategy (NMS) in 2004 stated, "We will work to deny terrorists safe haven in failed states and

ungoverned regions" ⁴ Further, it advocates that global antiterrorism is an extension of security in partner nations. In 2006, the *National Military Strategic Plan for the War on Terrorism* noted that, "terrorists sometimes conceal themselves in remote hideouts, with minimal contact with authorities" and that these sanctuaries offered freedom of movement because of poor government control. ⁵ The *National Defense Strategy* (NDS) of 2008 attests that the inability of foreign governments to maintain influence over their territories challenges global security and that non-state actors who are fueled by religious violent extremism are a growing concern to the existence of many key states. The NDS goes on to charge partnerships and other indirect approaches will be used to deny access to these institutions and prevent them from gaining a foothold. ⁶ *The National Security Strategy of the United States of America* (2010) says that, "Failing states breed conflict and endanger regional and global security." ⁷ The 2011 *National Strategy for Counter Terrorism* reaffirms this notion charging that, "weak states and failed ones are a source of international instability…often, these states may become a sanctuary for terrorists." ⁸

At the operational level, Air Force Doctrine Document 3-22 (IC-2), *Foreign Internal Defense* also defines this threat but has expanded language to include context provided by the *Strategy to Combat Transnational Organized Crime*. ⁹ AFDD 3-22 states:

...This global dynamic is the genesis of an increasingly complex form of modern warfare—insurgency, terrorism, drug wars, separatist insurrections, radical nationalist movements, and spiritual revolutions, all taking place now with unprecedented intensity on various political, economic, informational, and military battlefields around the world. This broad range of politically destabilizing violence is growing more lethal and broader in scope with the expansion of heavily armed, drug-funded professional organizations that can cripple or dominate lesser-developed countries. These organizations are moving into the midst of modern, industrialized society, including the US.

...The nature of threats has shifted from governments fighting field-worn guerrillas and communist political cadres roaming the countryside "winning hearts and minds" to international networks of financiers, investors, promoters, recruiters, weapons trainers, forgery experts, communications specialists, electronics technicians, spies, bombers, and shooters deeply imbedded in many countries of the developed and developing worlds. At

heart, the scene is little changed from classic models, though now the tools of revolution and insurgency include global reach and potentially weapons of mass destruction. This is a key change that mandates a re-evaluation of the US approach to traditionally viewed "low-intensity" threats. The events of September 11, 2001, demonstrated that a single tactical event can have a devastating and lasting strategic impact. ¹⁰

Considering this perspective, defense and development initiatives are targeted at social, economic, and political solutions for countering instability.

Thus, having described the threat of illicit networks exploiting un- or loosely-governed territories to the strategic and operational environments, the next step of this process becomes examining how these countries may react in order to restore order and instill legitimacy. The details of this section will provide context when describing the role of the United States if participating in the security and stability operations of another nation.

IDAD and FID – The Ways to Defend and Develop

Nations are most susceptible to unstable conditions because of fragmentation along multiple lines of greed and grievance. Collier and Hoeffler write that most conflicts are, "ostensibly in pursuit of a cause, supported by a narrative or grievance." ¹¹ These grievances often include social, economic, and political discrimination compounded by a weak national identity. Conventional thinking relies on a cycle of grievance causing conflict, which in turn causes more grievances yielding deeper conflict. The results of the Collier and Hoeffler study suggest certain commodities (drugs, diamonds, weapons etc) may create greater opportunity for conflict by generating not only the grievances themselves, but also a means to finance further struggle. ¹² In 1776, Scottish philosopher Adam Smith outlined four basic functions of government in his classic work, *An Inquiry into the Nature and Causes of the Wealth of Nations*. These few and well defined roles are Defense, Justice, Public Works and Institutions, and Dignity of the Sovereign. ¹³ A properly functioning government has the ability to regulate

resources and commodities in a manner that alleviates the complaints as well as the conflict. Weakening of the state occurs when the government is unable to perform one or more of these principle functions, which then allows grievances to build. Measures of instability may include population growth rate, average age of population, economic growth rate and inflation. IDAD represents a comprehensive application of national power and is one way many governments attempt to prevent shortfalls in these four areas.

The aim of IDAD is to create long-term economic and social stability through political means, which sometimes includes the use of force. IDAD focuses efforts to put down attempts at violence and insurrection. As a concentrated effort, it seeks to preemptively address issues at the heart of internal grievances that spur the level of criminality and rebellion. ¹⁴ In so doing, IDAD assembles programs along four core tasks: *balanced development, security*, *neutralization*, and *mobilization*. ¹⁵ Similar to the way an object can be suspended by magnets, in order to be successful each function of the IDAD strategy requires equal attention to achieve harmony with the other parts of the system. These IDAD tasks are described in the next few paragraphs, which are followed by an explanation of how U.S. foreign policy may comprise of FID as a way of backing a struggling ally.

Balanced development seeks to grow a nation's infrastructure in a manner that benefits the entire population. To do that, balanced development must speak to legitimate injustices regarding freedoms, education, and property rights. Religion, ethnicity, and cultural differences are all contributing factors that may affect the character of this kind of conflict. If left unaddressed or misunderstood, these complaints become a list of issues for subversive elements to manipulate. By challenging these issues head-on and being sincere, balanced development alleviates these sources of friction within the HN before they become out of control. ¹⁶ The

underlying theme for balanced development is equality so overcoming established systems like class and wealth becomes challenging. But, by bringing pieces of infrastructure that promote human subsistence (sewage, water, electricity, housing and roads) many tensions can be eased.

Security is a two-tiered system of control that first, protects the population as well as the institution and second, safeguards development efforts. Defense of the citizenry, important public systems, and vital economic resources are crucial concepts that form the foundation of legitimacy. Security also soothes the progress of development efforts, allowing them the vital time needed to set in. Effective law and order and a legitimate governing agency may deny subversive groups access to popular support, as police are sometimes the first to detect public unrest and political mobilization. ¹⁷ Often for the public, the notion of security is directly tied to the means by which it is provided such as military, paramilitary, and police forces. Public trust of these institutions is important and usually translates to the perception of a stable environment.

¹⁸ Therefore, security efforts should also include an internal review of law enforcement systems and standards to ensure they do not do supplant the efforts of the central government.

Neutralization is a complex coordination of activities designed to isolate dissidents and force a wedge between them and cooperative citizens. ¹⁹ Neutralization may use legally sanctioned physical or psychological methods to "disrupt, disorganize, and defeat" an illicit institution. Its goal is eliminating both active and passive public support of insurgent violence. Neutralization relies heavily upon civil law enforcement that is trained to root out deeply embedded insurgents. During neutralization activities, the HN must maintain its reputation and be cognizant of challenges to its legitimacy. ²⁰ An example of neutralization is the Phoenix Program from Vietnam. Though some of its methods were arguably controversial, Phoenix proved effective at penetrating Viet Cong Infrastructure by gathering local intelligence and going

into villages and hamlets to neutralize key enemy leadership. ²¹

While Phoenix was primarily a combined Vietnamese/U.S. Special Forces and Central Intelligence Agency (CIA) initiative, neutralization does not preclude the use of regular military forces for policing actions. This form of control may be required to restore stability if violence becomes severe. ²² But force is only meant to buy time for reform and diplomatic efforts to take place. If fighting occurs, security forces have to react lawfully when putting down unrest as unconventional policing methods may prove counterproductive or possibly escalate tensions. A restrained approach, even when government assumes emergency control, may deny the adversary a further exploitable issue. ²³ Regardless, security forces must understand that their role is providing safety to law-abiding citizens.

Finally, *mobilization* encourages the population to support the government and contribute in IDAD efforts. Similar to mobilization for guerrilla warfare, the goal here is to strengthen the social-political control mechanisms. By mobilizing popular support for its cause, the legitimate institution seeks to "out-administer" any uprisings from indigent factions. ²⁴ A strong informational campaign can assist in promoting popular support and ease many tensions over change initiatives. ²⁵ Mobilization in this form assumes a zero-sum game whereby denying manpower and resources to illicit groups pools them under the support of the government. ²⁶ The Communist Party in Vietnam understood the importance of a unified front and in its *Primer for Revolt* wrote, "To carry out Resistance and national reconstruction, we must mobilize all the forces of our country...on that front, the whole people should act as one to fight the aggressors, repress the traitors, defend the Democratic Republican regime and reform our country." ²⁷ Now that some of the causes as well as counter-actions of deteriorating states have been addressed, it is important to understand how the United States may help to set the conditions so that illicit

organizations may no longer exploit a destabilized environment.

Earlier details regarding the exploitation of poorly governed areas by criminal institutions paint a strategic setting that is a real threat to U.S. defense policy. In countries where national interests are concerned, the President may elect a FID response to augment governments who have requested defense and development support. The link between U.S. FID and NSS goals is laid out in Joint Publication 3-22. The focus of FID is, "combating internal threats to assist the HN in maintaining legitimacy and influence over the relevant population, especially as it pertains to irregular warfare." ²⁸

The concept of FID is originally captured within National Security Action Memorandum (NSAM) 182 by President Kennedy and is defined as the, "participation by civilian and military agencies of a government in any of the action programs taken by another government or other designated organization to free and protect its society from subversion, lawlessness, and insurgency." ²⁹ FID offers partner nations an augmented means to defend themselves, as well as bolster security and stability operations that facilitate successful development. What FID does not do is apply a template for success that transfers from one location to another. Successful FID models have to be tailored to help lesser-developed countries govern better. Trained advisors who take into account the contributing factors of instability determine the specific needs of the HN. ³⁰ Solutions in this manner are sometimes driven by religious, social, economic, and political factors that are beyond a common U.S. frame of reference, and thus not all choices are solely aligned with American interests. In fact, the notion that defense and development solutions may not be wholly American is an accepted truism of FID.

The underlying premise of any FID operation is that the strategic initiative lies with the HN. ³¹ It is important that the U.S. always plays a supporting role to the HN's IDAD to ensure a

lasting solution to the problem. Not adhering to this axiom could undermine the complete endeavor and possibly cause a transition to American combat operations. ³² In the eyes of the people, the government's legitimacy is the greatest factor in an insurgency-type situation. If the United States were to intervene to the point of direct control, this could fuel anti-American sentiment and further erode HN legitimacy. However, assistance in the form of training, intelligence, and foreign aid tend to work well. ³³

An example where limited American military presence has been beneficial is in the Philippine Islands post September 11, 2001. During the 1990's the Islamic organization, Abu Sayyaf Group (ASG) established a foothold on the island of Basilan. In order to combat this terrorist threat, SOCPAC forces acting in advisory roles through JSOTF-P trained and equipped Armed Forces of the Philippines (AFP) in COIN methods and maneuvers that focused on the population as the center of gravity. By establishing a structure of balanced campaigns throughout the archipelago AFP were able to isolate the terrorist threat rendering them mostly ineffective by 2010. ³⁴ The intention of minimum American intervention in this instance is that limited external interference cultivates domestic solutions to domestic problems. The implication of this minimalist approach is that a direct American fighting role is less than favorable and should be used in limited effect to prosecuting the War on Terrorism, hence the importance of FID to the National Security Strategy.

As is often the case when implementing any change program, such as IDAD and FID, reform efforts must be guided by an overarching strategy. For Combatant Commanders their operational plan is derived from the NMS, which supports the NSS and implements the NDS from the strategic level down to the tactical. This theater plan translates to national, joint and coalition tasks and is focused on achieving a specified state that is regionally focused. Similar to

the manner in which a draw down or military-withdraw date provides a deadline, the IDAD and FID theater plan should define a destination or a definition for success that ensures unity of effort, collaboration, or deconfliction. ³⁵ One example of a badly administered defense and development strategy is Vietnam where fractured political and military strategies aligned poorly. ³⁶ Without cohesive goals, the military assistance campaign proved disastrous.

Unity of effort must not only extend from a series of goals, it must be coordinated across the spectrum of national power. ³⁷ Experts like David Kilcullen and Stuart Eizenstat contend that in order to be successful, a counterinsurgency campaign requires this integrated approach so as to erode an adversary's power, influence, and will over the indigenous population through government reform, education, propaganda campaigns, and economic means vice a solely military solution. ³⁸ This "whole of government" description reinforces the balancing act required of IDAD to achieve harmony. For the U.S., unity of effort means applying the DIME (Diplomatic, Informational, Military, Economic) construct, as it is an effective tool used to understand the powers of state. ³⁹ The importance of unity of effort across the spectrum of DIME is highlighted by the Hukbalahap Philippine counterinsurgency and U.S. security force assistance in El Salvador throughout the 1980s. ⁴⁰ For both of these cases, the respective governments recognized the need to influence through civic action (Diplomatic, Informational, Economic) rather than by force (military). Thus, government programs focused on social reform like digging wells, fixing bridges, expanding roads, fabricating houses, putting up schools, and distributing land. This approach fostered a connection between the government and its population while at the same time subverted any reliance on the insurgents. In both the Philippines and El Salvador the military was used, in effect rounding out initiatives across the DIME model. However, its focus was to instill legitimacy vice liberal application of power and

justice. ⁴¹ This lesson was used again in the Philippine Islands (P.I.) throughout Operation Enduring Freedom - Philippines. Under a new Mutual Defense - Security Engagement Board and Visiting Forces Agreement, the terms and conditions of foreign assistance were redefined. The focus of U.S.-PI defense and development partnerships focuses primarily on planning, civil and military interoperability, information and public affairs, medical and veterinary assistance, disaster relief, various construction and engineering projects, as well as security force operations. ⁴² Consequently, FID is a dynamic evolution that focuses on a holistic description in order to integrate a wide range of non-governmental and federal agencies. As such, inter-agency cooperation operations play a key role in FID to ensure the effective application and allocation of combined resources.

Specifically within the range of military operations, the role of FID is primarily "at the tip of the spear" providing services, training, and equipment to the HN. The manner of support is categorized as *indirect* or *direct* support operations. Partnering agreements like Security Assistance, Joint and Combined Exercise Training (JCET), and foreign exchange programs are all examples of indirect support. Direct support, on the other hand, covers a dynamic range of FID activities including combat. Logistics, Civil Affairs, and humanitarian aid are all examples of direct support that do not involve fighting. Combat is only used to stabilize a situation in order to permit local and HN military forces to regain the initiative. ⁴³ Subsequent sections of this paper discuss these functional areas in greater detail.

AvFID's Role in Countering Instability

Up to now, this paper has exposed the exploitation of un- and poorly governed regions by illicit organizations as a direct threat to U.S. national interests and highlighted how IDAD and FID strategies help HNs to counter this threat. The following is a discussion of the elements that

makes the jump from purely ground initiatives and the application of aviation for FID (AvFID) as well as its role in creating stability. With respect to this paper, the role that aviation plays within nations relative to this discussion is concluded to be inherently positive. ⁴⁴ But, before explaining the role that aviation plays to security and stability operations, it is essential to describe the conditions that aviation advisors encounter in these places and the role AvFID plays in improving such environments.

In general, it is expected that aviation infrastructure is lacking in states where instability exists. By American and international standards, the scale of aviation is small, is ineffective, possesses limited repair capability, varies with regards to personnel policies and training, and is outdated technologically. ⁴⁵ Additionally, HNs threatened by insurgency usually require outside financial and/or materiel assistance to acquire critical capabilities, conduct in-depth maintenance, and train aircrew and mechanic personnel. ⁴⁶ Quoting the Federal Aviation Administration's (FAA) memorandum on Afghanistan, "Decades of unrest and conflict have devastated Afghanistan's civil aviation infrastructure, depleted its skilled aviation workforce, and severely diminished the country's capacity to provide air navigation services, and regulatory and safety oversight." ⁴⁷ The letter goes on to describe a comprehensive USAID/FAA plan to improve technical and managerial expertise, renew existing infrastructure, enhance standards, procedures, and policies, as well as conduct training and equipment to develop Afghanistan's aviation capacity. The expense of aviation infrastructure extends to aviation operations as well. In thirdworld countries, antiquated networks or resourceful means commonly perform command, control, and communications (C3) duties. In this manner, HN security forces generally lack any reliance on aviation assets because obsolete systems provide poor integration between air and ground elements. 48

In countries lucky enough to have even outdated systems, networks rarely extend beyond direct lines between major transportation hubs, thus limiting access to remote regions by government officials seeking to introduce IDAD programs. ⁴⁹ Also, few civil and military airfields exist outside of major population centers. Airports serve most capital regions; however, those prove impractical as hubs for security force efforts due to congestion, restrictions, and operational security. Africa for example had 2900 airports in 2007 and only an estimated 261 of those received scheduled maintenance. Its three major international airports: Addis Ababa, Johannesburg, and Nairobi handle over one-third of all international traffic to the entire continent. ⁵⁰ Airports that do exist in more secluded environments are quite primitive and rarely have electricity, maintenance or support, or even a runway that is improved beyond a dirt or grass strip. ⁵¹ Turning to Africa again as an example, it has some 200 small strips acting as distribution points for domestic air but fewer than half of those are in "viable" condition. 52 Navigation to these fields is also restricted by inadequate or non-existent navigation equipment like Non-directional beacons (NDBs), VHF Omni-directional Radio Range finders (VORs), Tactical Air Navigation Systems (TACANs), terminal approach procedures, or even simple airfield lighting systems. 53 Without these aides, terrain avoidance, night flight, and/or continuation in marginal weather are nearly impossible and most usually unsafe. As a consequence, flight operations usually adhere to basic visual flight rules (VFR). In 2004, Africa accounted for 22 percent of worldwide aviation-related mishaps while only conducting 4.5 percent of flights globally. The 2006 accident rate was 4.31 aircraft per million departures in Africa vice 0.65 globally. 54 The ramifications of these conditions are that many areas, often those needing assistance the most, are beyond the reach of commercial and conventional aircraft. Ultimately, these constraints negatively impact the ability of most modern aviation assets to support defense and development efforts and are cause for reluctance on the side of security forces. FID initiatives are meant to address these shortfalls by considering the general requirements of the HN along employment and sustainment capabilities. By definition, the focus of AvFID operations is to, "develop and improve HN airpower capabilities." ⁵⁶ As a subset of FID, and because the air component may operate simultaneously in all its phases, AvFID adheres to the same restrictions of the joint strategy. ⁵⁷ Thus, the HN's IDAD in conjunction with comprehensive U.S. policy guidance through the Geographical Combatant Commander (GCC) determine the scope of foreign assistance and the character of AvFID. ⁵⁸

As previously mentioned, U.S. FID assistance is applied as either indirect support (equipment transfers and training) or direct support (advisory roles, intelligence, strategic airlift, and combat). These activities may occur simultaneously but represent significant differences with regards to American commitment. ⁵⁹ Indirect Support activities are associated with shaping efforts and emphasize building sustained HN self-sufficiency. The intent is to permit the HN to build its own force structure. ⁶⁰ For this reason, foreign military sales (FMS) are largely the form in which security assistance (SA) is received. FMS is the transfer of major military aviation standard and non-standard equipment as authorized by the Foreign Assistance Act of 1961. ⁶¹ By building HN aviation capacity and integrating it with security operations, political initiatives of the IDAD can begin to address the social and economic needs of the public while keeping disruptive elements at bay. ⁶²

A more amiable aspect of the indirect approach is the military training team (MTT). MTTs deploy to HNs in order to provide specific training to local personnel on the operation, maintenance, and employment of acquired systems. They may also conduct aviation

assessments for security assistance organizations (SAOs) in order to create goals and operating procedures or to inform GCCs on policy recommendations. ⁶³ Aviation assessments target HN capabilities and limitations, resource caveats, aircrew skills, fleet airworthiness, sustainability, and operating potential. ⁶⁴ Based on these assessments, training and advisory assistance teams may then facilitate indigenous aviation forces that are engaged in IDAD operations and actions.

Mission training by aviation instructors covers tactics, techniques, and procedures (TTPs) in Combat Search and Rescue (CSAR), Command and Control (C2), Combat Support in the form of air-ground operations: insert/extract/resupply, Close Air Support, and Intelligence Surveillance and Reconnaissance (ISR). Training assistance is also available in various aviation support roles including ground safety, supply line management, aviation maintenance, ordnance handling procedures, support equipment, aviation life support (ALS)/medical, airport defense, aviation firefighting, communications, and aerodrome administration. ⁶⁵ It is necessary here to make the distinction that aviation training is neither time nor place specific and offers a procedures-based approach to flight operations. Therefore, it is not the aim of aviation training to address threats specific to a HN. Instead, a cadre of combat aviation advisors teaches counter-threat tactical employment of aircraft. ⁶⁶ This layered approach to training and advising can set the conditions for the HN to possess perpetual aviation capabilities, in support of defense and development, with both civil and military solutions.

In contrast to indirect support, direct support may or may not include combat operations.

By its character, direct support is much more immediate and focused on the diplomatic and military aspects of DIME. Meant as a temporary effort that is withdrawn at the earliest opportunity, direct support is applied when HN organic institutions have had insufficient time to respond to formal, indirect support mechanisms or build their own capacities to a level

commiserate with the threat at hand. ⁶⁷ In this case, operations typically fall into one of two categories, those that involve combat and those that do not. U.S. participation in non-combat direct support includes civil-military operations (CMO), humanitarian assistance, counternarcotics, intelligence support, psychological operations, and logistics. With combat, U.S. contribution expands to include American military personnel providing electronic warfare, ISR, precision aerial attack, and forward air controllers. ⁶⁸ When involving combat operations, direct support takes place almost entirely in the military form of the DIME construct but requires a restrained approach on the part of U.S. military personnel. In keeping with the underlying premise of FID, American involvement must take a supporting role to ensure HN legitimacy, even when fighting occurs. ⁶⁹ In sum, improving aviation infrastructure, creating greater capacity for both civil and military aviation support, training more proficient forces, and integrating all of these enhanced capabilities into the IDAD structure at all levels are the ways AvFID promotes stability in HNs.

<u>Helicopters – The Means to Stabilize a Nation</u>

Given the description of aviation in third-world countries and having defined what it is that AvFID does to improve those conditions, the following paragraphs highlight the specific attributes of aviation in creating a secure and stable environment. It will also provide case evidence that helicopters are a successful platform for defense and development initiatives. Inherent to this section is the charge that aviation's supporting roles are its most effective way to stop illicit groups and in so doing, this section asserts that helicopters provide the most meaningful platform to fulfill IDAD and FID directives.

The essential premise of defense and develop strategy is that "the people" are the main objective. In this regard, security and stability operations are conducted in similar fashion to

counter-insurgency (COIN) where the focus is to create long-term economic and social stability through political means in order to win the support of "the people". Using aviation to accomplish this task is challenging. Insurgency groups rarely possess open legitimate targets such as critical infrastructure, centralized leadership, or massed armies. Ernesto "Che" Guevara captured this concept in *Guerrilla Warfare* where he noted, "The utility of aviation lies in the systematic destruction of visible and organized defenses; and for this there must be large concentrations of men who construct these defenses, something that does not exist in this type of warfare." Additionally, this kind of warfare proves quite problematic with the way insurgencies move among the population. This added level of complexity makes isolating combatants from non-combatants quite difficult. This tactic puts emphasis on the ability to field police, paramilitary, or light infantry formations, vice the widespread application of firepower. This concept minimizes the use of precision strike and runs counter to institutional doctrine.

Precision attack has, for the most part, been the nucleus of airpower theory since World War II. Advocates tout its ability to forego the use of ground troops while still directly affecting an enemy's center of gravity. ⁷² However, this tactic is contrary to airpower's role against insurgents, as a counterinsurgency-type conflict cannot be accomplished without personnel on the ground interacting with the indigenous population. As identified by the Army *Counterinsurgency* manual, aircraft can, "strike insurgents...however, given the nature of the COIN environment, airpower will most often transport troops, equipment, and supplies and perform intelligence, surveillance, and reconnaissance mission." ⁷³ Thus, it is by two supporting functions that airpower defines its primary role in fighting illicit organizations: air mobility and ISR. ⁷⁴

A graphic representation of this dynamic can be found in Appendix A and takes a similar approach to countering terrorism as CONPLAN 7500 in that an indirect approach is the preferred response. ⁷⁵ Both of these espousing functions bolster balanced development, security, neutralization, and mobilization. However, air mobility offers credence to aviation's ability to connect all aspects directly to the population. ⁷⁶

The idea that air mobility is the most encompassing function of aviation in COIN is best articulated through two fronts. First and foremost, is the character of an insurgency. Mao Tsetung and Che Guevara have long based tactical success for insurgents upon the use of guerilla warfare. The common theme between these two theorists is the importance of mobility. The *Guerrilla Warfare* Mao stated that mobility is the "principal element" of a victorious strategy. He understood that, for the guerrilla, relative superiority was fleeting and to deny speed, secrecy, deception, and violence to the fighter was to deny him victory. Like two cars racing through an obstacle course, the more maneuverable vehicle has the advantage. Therefore, improving HN mobility beyond that of the guerrilla is one way to counter the insurgency. This idea aligns well with air mobility, as the specific attributes of airpower are speed, range, and flexibility.

Additionally, the elevation aspect of airpower provides a challenging perspective to the guerrilla's ability to hide or maneuver under cover normally afforded at ground level. Delivering and sustaining security forces to patrol intensively at or near points of instability is one advantage offered by air mobility.

Second, air mobility produces effects across all facets of the HN IDAD beyond that of simply addressing the fighter. It improves balanced development in outlying areas through its ability to position equipment and supplies for housing, bridging, power plants and hydroelectric facilities, environmental protection, and transportation infrastructure. ⁸⁰ Air mobility also offers a

legitimate conduit for addressing public grievances by extending centralized government to farflung regions. ⁸¹ Moreover, air mobility can transport essential public services like food and water, clothing, medical care, veterinarians for livestock, technicians and specialists in agriculture/agronomy/agribusiness, sanitation and hygiene, as well as teachers. ⁸² An example that showcases this application of air mobility effectively is Humanitarian Assistance Disaster Relief in Haiti after the 2010 earthquake. Within one week, the U.S. Navy alone had delivered 32,400 gallons of water, over a half-million bottles of water, 9,000 pounds of medical equipment/supplies, and over 110,000 meals relying heavily on its fleet of helicopters, which conducted 336 logistics runs. ⁸³

In essence, air mobility facilitates the IDAD task of mobilization. By opening vast territories and remote areas of the country, aviation—and in particular helicopters with their ability to land in the most basic of environments—extends government outreach to areas most susceptible to infiltration and destabilization. When a flood hit Pakistan in 2010, concerns grew that the Taliban would infiltrate the area and use the incident as a recruiting tool. In response, the U.S. sent a helicopter squadron from Bahrain to assist in defense and development efforts. ⁸⁴ In so doing, information campaigns and social programs that legitimize the central government and influence the populace become more effective. ⁸⁵

Air mobility proves highly effective with regards to boosting security and neutralizing insurgencies under the IDAD construct. Phillip Davidson in *Vietnam at War* acknowledged this saying, "Without air transport, United States operations in Vietnam would have been vastly different, and at best, only marginally effective...but the lack of a good road net gave the advantage in strategic mobility to the Americans with their cargo aircraft and helicopters." ⁸⁶
Aviation-related security and neutralization missions include air assault, insert/extract, medical

evacuation (MEDEVAC), non-combat evacuation operations (NEO), humanitarian assistance disaster relief (HADR), fire/rescue, and general logistics. ⁸⁷ By rapidly transporting security teams and resupplying those positions, air mobility maximizes the security force's ability to mass and maneuver while minimizing the advantages of an insurgency to embed with the indigenous population or in remote locations. ⁸⁸ Helicopter assets prove most adept at fulfilling these missions as their low and slow flight profile permits closure, identification, and engagement of the enemy, while vertical lift capabilities are best suited for employment and retrieval in the target area. ⁸⁹

As early as 1940, the U.S. Marine Corps understood that increased emphasis on airlift capabilities would not only disrupt enemy activity but it would counter difficult geography as well. This notion is captured in the *Small Wars Manual*.

...[Transport] has proven indispensable for small wars operations. The lack of railroads, improved motor roads, and navigable waterways in some of our probable theaters of operation makes the supply and transportation of troops by air more or less mandatory. ⁹⁰

In this sense, air mobility creates a line of communication and supply to deployed troops that can extend to the general population as well. As defense and development operations extend inland, navigable waterways and rail/road systems are usually fewer. ⁹¹ So, as distances increase from the centralized government so too does demand on aerial transport. Conversely, suitable areas to land become smaller and smaller making the vertical capabilities of helicopters necessary.

In reality, during the Malayan Emergency, Vietnam, and El Salvador, as well as in Colombia, Iraq, the Philippines, and Afghanistan, helicopters contributed considerably to security and stability operations (SSO) and were instrumental in counter-insurgency (COIN), counter-narcotics, and security force assistance (SFA) actions. In each of these cases, the ability to airlift security forces to isolated positions proved invaluable to chasing and eradicating threats.

Lessons learned from those conflicts show that helicopters enable security teams to work in remote and rugged terrain, areas traditionally controlled by insurgents that provide them refuge for training, maneuvering, and thriving. During the insurgency in El Salvador for example, helicopters used by the Salvadorans were crucial to improving security-force fighting potential.

92 Not only were units able to interdict over greater range, but also Salvadoran morale improved once soldiers knew they could rely on helicopters to get them medical attention in only minutes from these far-out locations. Given this form of air support, military and para-military forces became much more assertive in taking on illicit networks.

This change was also noticeable in the Philippine Islands where, in the aftermath of September 11, 2001, Philippine units refused to conduct night raids against terrorist operatives. Since there were no CASEVAC capabilities, engaging militant Islamist groups seemed careless in their eyes. About a year later, the first Philippine Air Force (PAF) UH-1H helicopter squadron was born from aircraft delivered by the United States. In subsequent years, U.S. AvFID advisors trained PAF helicopter pilots to conduct full mission profiles for day and night operations including raids, hostage recovery, and MEDEVAC/CASEVAC. Ground combat teams soon began night operations after acquiring this capability. ⁹⁴

Likewise, helicopters increase the chances for operational success. As was the case in Iraq, insurgents will likely disrupt, or attempt to intercept any ground transportation by employing various tactics like ambushes, improvised explosive devices (IEDs), and roadside bombs. This was widely reported in December 2004, when the DOD responded to volatile conditions in theater by significantly increasing air delivery missions using C-130s and helicopter resupply. ⁹⁵ Air transportation was judged compulsory to minimize equipment losses,

protect both military and civilian lives, as well as to avoid alienating the populace by limiting the impact of combat operations into their daily lives. ⁹⁶

Similarly, in early years of the Vietnam conflict, field operations were limited by the amount of water, rice, and ammunition a South Vietnamese soldier could carry. However, once helicopters were introduced that all changed. The new helicopter squadrons "greatly increased the potential of the South Vietnamese Army in the anti-guerrilla campaign...[and] gave the ground army a great deal of tactical mobility." ⁹⁷

General Westmoreland, commander of military forces in Vietnam, also wanted more helicopters. He viewed them as "the cutting edge of an allied counteroffensive." ⁹⁸ Specifically, General Westmoreland envisioned large airmobile helicopter formations that would operate internally to the country. ⁹⁹ Field Force Commander, General Ewell, also believed that successful counter-insurgency operations were "predicated on the availability of helicopter support" drawing on his experiences in the U.S. 9th Division. ¹⁰⁰

The Battle of Ia Drang in Vietnam highlights the first time in modern combat that Americans used air mobility tactics that were specifically designed around the unique capabilities of helicopters. ¹⁰¹ Due to the terrain, conventional tank, artillery, and logistics forces were ineffective; therefore local observers coordinated all aspects of aerial attack and mobility through the sole use of helicopters. Now dubbed air assault, this kind of operation is characterized by the total integration of helicopter assets for mobility, surveillance, and firepower in the battle space while under the direct control of a ground or air maneuver commander. ¹⁰²

Perhaps the best modern day case study where helicopters have proven effective in counter insurgency is in Colombia, where the recognized government struggled with the

Revolutionary Armed Forces of Colombia (FARC). Since the conflict began in 1966, the legitimate government, under President Andres Pastrana Arango, had experienced more than a few challenges. This turmoil came to head in the 1990s when the FARC exercised substantial control and was capable of organizing triumphant and regular attacks against military, paramilitary, and security forces. In the following decades however, the Colombians against the FARC insurgency made significant headway and as of 2010, the FARC was mostly decimated.

103 This spectacular occurrence was the result of Colombian political will in conjunction with substantial American FID and SFA.

With the support of foreign military advisors from the U.S., Colombia implemented a hard line agenda to professionalize its forces and develop the capacity to reach outlying areas of the rugged Colombian terrain. ¹⁰⁴ By relying on the findings of AvFID aviation assessments, the Colombians opted to appreciably grow the air mobility role of its security forces. Now, Colombia possesses and operates a substantial fleet of helicopters. Notably, its UH-60 (Blackhawk) armada is the third largest fleet of its kind in the world. ¹⁰⁵ In this case, airpower and increased mobility—specifically from the helicopter—decisively improved the Colombian's ability to deny asylum to the FARC. Today, Colombia's government is no longer as susceptible to the illicit activities of the FARC.

In summary, airpower's proper role in confronting illicit organizations is similar to the tactics for counter-insurgency and is defined mainly by its support functions. Of particular importance is its ability to increase mobility for defense and development initiatives. The missions of air mobility provide the HN with flexibility, initiative, and against the enemy—surprise. These are attributes that normally favor the insurgency. ¹⁰⁶ Furthermore, helicopters are best suited to fulfill this role and allow the HN to quickly extend its influence to remote regions

of the country and carry out development, security, neutralization, and mobilization tasks of the HN IDAD.

It is important to note that vertical lift is vital to defense and development operations. Considering the breadth of its mission capabilities, helicopters offer a relatively cheap alternative to fixed wing counterparts when considering the decentralized infrastructure demands of the unstable environment and specialized roles of airplanes. The helicopter can be used as a gunship, as well as a vertical lift platform for battlefield mobility. It can quickly respond to other catastrophic events for NEO and HADR. ¹⁰⁷ It can reach areas that traditional airplanes cannot and requires a smaller operating footprint at those locations. Helicopters also provide vital public infrastructure such as medical airlift, real time intelligence and news, and movement of key infrastructure professionals like teachers, architects, and government officials. These capabilities in the construct of IDAD and FID oftentimes mean the difference between success and failure.

Conclusion

This study has highlighted the threat posed by instability in poorly governed states and their susceptibility to abuse by criminal organizations; how aviation supports the overall U.S. FID effort by facilitating the IDAD tasks of balanced development, security, neutralization, and mobilization; and drawn upon historical experience using helicopters to show that the supporting airpower function of mobility is the most important contributor to the overall defense and development effort. In order to prevent instability inside a HN, it is important to build cohesive IDAD and FID strategies that promote growth, address the underlying causes of fragility, but also underscore the proper government's legitimacy. The ultimate goal of AvFID is to cultivate a self-sufficient and effective civil and military aviation capability in the HN—one that supports

their IDAD campaign.

Specifically, this monologue contends that helicopters offer the most meaningful platform for supporting HN and U.S. defense and development efforts. By fulfilling multiple aviation roles at a comparatively minimized operational cost and footprint, helicopters provide the HN the maximum return on investment. Helicopters provide the flexibility, surprise, and initiative—advantages normally offered the insurgent—even in remote locations where runways and airfields are not available.

As of October of 2012, the Air Force terminated its rotary wing FID capability and transferred the 6th Special Operations Squadron—responsible for assessment, training, advising, and assisting foreign aviation forces in airpower employment, sustainment, and force integration—to the Special Operations Training Center. This restructuring of Air Force Special Operations Command (AFSOC) and cancelling of helicopter AvFID casts serious doubts upon the Air Force's commitment to irregular warfare and calls into question Special Operations Command's (SOCOM) credibility for assisting HNs in building partnership capacity. In order to restore the ability to train allied nations, it is recommended that SOCOM make improvements along three lines of effort. First, AvFID should not be the sole responsibility of AFSOC since all four military services utilize aviation, are capable of fulfilling the role of aviation instructor/advisor, and HNs may only require support in one functional area. Instead, SOCOM should have a dedicated AvFID Wing under the Joint Special Operations Command (JSOC) that consists of helicopters, short takeoff and landing (STOL) logistics/ISR platforms, and light attack fixed-wing aircraft. The AvFID Wing could be smaller than a typical USAF Wing and more similar in size to an Air Combat Element of a Marine Expeditionary Unit. As a Joint venture, the Wing could be manned with elements from all services of the Department of Defense but in the

context of this paper, Army and Marine Corps experience is highly desirable because of their focus on rotary wing aviation. In any case, the helicopter squadron itself would possess at least two types of aircraft, which ties into the second line of effort—platforms.

In order to keep supportability manageable, the Wing should consider making a squadron from three types of helicopters: the Russian-made Mi-8/17 Hip, the Italian/American-made Bell 212 Huey, or the Canadian-made Bell 206 Long Ranger. As some of the most prolific helicopters in the world, any combination of these three types would fill the vacancy that exists today. Ideally these aircraft would be the same as those found in the HN, however it is unrealistic to expect weak and failing states to procure new technologies. The wide spread availability of these platforms makes them very likely to exist in other nations but, the capabilities and performance characteristics of these models would closely resemble most any of the helicopters encountered in other countries by aviation advisors. If the HN is procuring aircraft, it is worth mentioning too that in their basic state, these three aircraft are capable of meeting the requirements of mobility as outlined by this paper. However, future upgrades can make these platforms viable for fulfilling the multiple-mission role as well. Whether utility, armed, or reconnaissance type capacity is needed, modifications and equipment to these platforms can be done at a relatively low cost should the HN desire. But upfront, developing nations need an inexpensive aircraft that can be procured in a reasonable number while supporting missions in austere environments, across the spectrum of IDAD, as these helicopters can. Finally, SOCOM needs a renewed commitment to training foreign aviation fighters by having a detachment (DET) style approach and robust exchange programs.

Because conflict of this type is likely to occur in many different locations at the same time, it is incumbent upon the AvFID Wing to possess flexibility. The character of the insurgency,

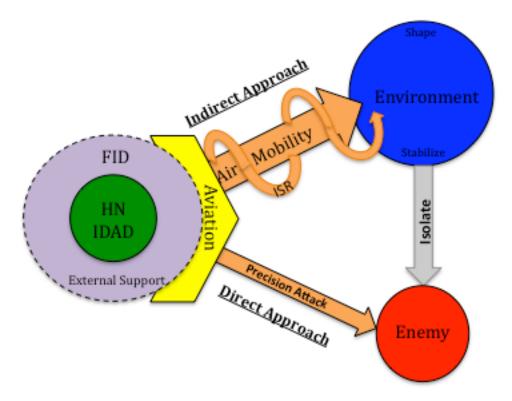
diplomatic relations, economic stability, social constraints, and existing HN aviation infrastructure/capabilities all impact the degree of US response. Through a thorough mission analysis and problem framing, a tailored detachment can provide the proper solution across the spectrum of environments encountered in poorly governed regions. Specific functions and structure would vary of course, but certain assumptions can be made. For example, the potential to execute multiple and simultaneous detachments of long duration while away from garrison (resourced and staffed), having the understanding that the main goal—building partnership capacity—could mean making sure the HN does not become too dependant upon the US, culturally astute instructors that are fluent in multiple languages, strong personalities that are effective operating alone and as part of a small team are all necessary attributes. Training DETs must also be oriented to conduct flight training inside the HN while a select few foreign pilots will be sent to the US for training at home guard. Basic flying skills, employment of airpower in COIN, regular maintenance, and flight operations would be part of the necessary syllabus. A course outline could be done in five stages where Phase I is indoctrination through ground school, primary, and platform specific flight training. Phase II would be focused on using aviation in support of IDAD—aircraft in civic action, medical and veterinarian services, construction projects, and logistics management. But, Phase II would also include non-combat mobility support to paramilitary and police forces. Phase III training means building HN capacity in ISR—collecting, analyzing, and exploiting aerial intelligence in support of ground forces, while continuing to supply air mobility. The implication of this sequencing is to stress mobility over tactical operations. Phase IV training offers only the most promising students the opportunity to support combat operations in a tactical role. Employment of the aircraft for limited fire support, direct action, and CASEVAC/MEDEVAC would be the skeleton for this

phase. Finally, Phase V grows the HN's own ability to conduct flight training. In this phase, experienced HN pilots are assigned instructor duty in order to foster an organic or self sustained capability. It is important to note, that not all countries will proceed through all five phases or progress through these phases in order. It would not be uncommon for Phase II pilots to jump directly to Phase V, foregoing III and IV. In fact, it could take years before a HN is able to supply combat capable air forces to the battlefield. In the framework of this paper however, the solution to countering instability lies with Phase II and the idea that air mobility provides the necessary tools to overcome instability.

In sum, to achieve an end to illicit organizations in poorly governed states, HNs must employ IDAD programs as a way of securing its environment and instilling its legitimacy. The United States may choose to utilize FID and its subset, AvFID, as a way to bolster HN efforts in this matter. The best means of doing this is to use helicopters to distribute all defense and development tasks quickly and efficiently at the tactical level to surrounding areas. SOCOM needs to reestablish its commitment to BPC, which can be accomplished by creating a Joint AvFID Wing under JSOC that has a helicopter training squadron.

Appendix A

AIRPOWER ROLES AGAINST INSURGENCY



*Created by the author and loosely adapted from CONPLAN 7500 and other various sources

Endnotes

- ¹ Joint Interagency Counter-Trafficking Center, EUCOM. http://www.eucom.mil/organization/command-structure/JICTC. "In much the same way that various trafficking has intertwined to form a network of networks, so too has the JICTC addressed this significant problem. Using a "whole-of-government" approach, the JICTC works to counter trafficking by sharing information with other U.S. government agencies and international partners to develop common operating procedures; build partner country ability to counter trafficking; and support U.S. interagency abilities to detect, monitor and interdict illicit activities."
- ² JP 3-22 *Foreign Internal Defense*, July 2010), ix. http://www.dtic.mil/doctrine/new_pubs/jp3_22.pdf
- ³ Air Force Doctrine Document (AFDD) 3-22 with IC 2, *Foreign Internal Defense*, 1 November 2011, vii. http://www.fas.org/irp/doddir/usaf/afdd3-22.pdf
- ⁴ National Military Strategy (Washington, D.C.: The Joint Chiefs of Staff, 2004), 9-10. http://www.hsdl.org/?view&did=446695
- ⁵ US Department of Defense, *National Military Strategic Plan for the War on Terrorism* (Washington, D.C.: Office of the Secretary of Defense, 2006, 15. http://www.hsdl.org/?view&did=459916
- ⁶ US Department of Defense, *The National Defense Strategy of the United States of America* (Washington, D.C.: Office of the Secretary of Defense, March 2005), 3. http://media.washingtonpost.com/wpsrv/politics/documents/national_defense_strategy_073108.p df.
- ⁷ *National Security Strategy* (Washington, D.C.: The White House, May 2010), 8. http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf
- ⁸ National Strategy for Counter-Terrorism (Washington, D.C.: The White House, June 2011), 9. http://www.whitehouse.gov/sites/default/files/counterterrorism_strategy.pdf
- ⁹ Strategy to Combat Transnational Organized Crime (Washington, D.C.: The White House, July 2011), 5. http://www.hsdl.org/?view&did=682263
- ¹⁰ Air Force Doctrine Document (AFDD) 3-22 with IC 2, *Foreign Internal Defense*, 1 November 2011, 12. http://www.fas.org/irp/doddir/usaf/afdd3-22.pdf
 To clarify, the terms can be defined as: Terrorism "The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological." Insurgency "An organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict." Criminal networks "A distribution system designed to subvert legitimate government. Often comprised of mutually supporting nodes to

further the aims of illicit activity. Includes the physical network, the financial network, the information network, and the communications network."

¹¹ Paul Collier and Anke Hoeffler. *Greed and Grievance in Civil War*. (The World Bank, Development Research Group, 2000): 26-27. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2000/06/17/000094946_00060205420 011/Rendered/PDF/multi_page.pdf

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<sup>12</sup> AFDD 3-22, 1.
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¹³ Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*. Book V, Ch. 1.

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<sup>14</sup> JP 3-22, II-1.
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¹⁸ Jeff R. Clark and Dwight R. Lee, *The Optimum Trust in Government*. Eastern Economic Journal, Vol. 27, No. 1, Winter 2001. http://college.holycross.edu/eej/Volume27/V27N1P19_34.pdf. Trust in constitutionally limited democracies has a direct correlation to performance.

²¹ Col. Andrew Finlayson USMC (ret), *A Retrospective on Counterinsurgency Operations*, Working Paper, 2001.

, Chinh, and Bernard B. Fall. *Primer for Revolt*. (London: Frederick A. Praeger, 1963) 67-68.

 $^{^{15}}$ Ibid, II-2 – 4.

¹⁶ Ibid.

¹⁷ Ibid. and AFDD 3-22, 13. "Popular support fuels the political mobilization required to generate workers, fighters, money, and weapons while denying the same to the government."

¹⁹ JP 3-22, II-2 – 4.

²⁰ Ibid.

²² JP 3-22, II-2 – 4.

²³ Ibid.

²⁴ Ibid.

²⁵ AFDD 3-22, 47.

²⁶ JP 3-22, II-2 – 4.

²⁸ JP 3-22, I-5.

²⁹ Ibid, I-2 – I-3. May also refer to the US Overseas Internal Defense Plan.

³⁰ Ibid, III-2.

³¹ Ibid, I-2 and Maj Greg E. Metzgar, *Unconventional Warfare: A Mission Metamorphosis for the 21st Century?* (Maxwell AFB, AL, 2000), 56-60. President Nixon firmly planted this principle into foreign policy following lessons learned during Vietnam. The Nixon Doctrine stated that the United States would continue to honor all treaties, that the United States would act as a nuclear shield for its allies, and that it would assist in the defense and development of other nations. But, Nixon went on to add that America would not undertake the defense of all free nations in the world. Each ally was responsible for its own security and that the means of providing manpower to the fight would be the nation under attack. May also be called the Guam Doctrine.

³² JP 3-22, III-1.

³³ Alan Vick, David T. Orletsky, Abram N. Shulsky, and John Stillion, *Preparing the US Air Force for Military Operations Other Than War.* (RAND) 1997, xvi.

³⁴ Geoffrey Lambert, Larry Lewis, and Sarah Sewall. "Operation Enduring Freedom-Philippines Civilian Harm and the Indirect Approach." *Prism 3 No. 4*, 120-122. http://www.ndu.edu/press/lib/pdf/prism3-4/prism116-135_lambert-lewis-sewall.pdf.

³⁵ JP 3-22, VI-41 and David J. Kilcullen, *Three Pillars of Counterinsurgency*. (US Government Counterinsurgency Conference, Washington D.C., 2006). http://www.au.af.mil/au/awc/awcgate/uscoin/3pillars_of_counterinsurgency.pdf

³⁶ Mark Bradley. *Vietnam at war*. Oxford. 1991, 40.

 $^{^{37}}$ JP 3-22, I-5 – 10.

³⁸ Kilcullen, 2006 and Vick, 3 and James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists* (Lawrence, KS: University Press of Kansas, 2003), 426. Also Stuart E. Eizenstat, John E. Porter, and Jeremy M. Weinstein. *On the Brink: Weak States and US National Security*. Center for Global Development, 2004. http://www.cgdev.org/doc/books/weakstates/Full_Report.pdf

³⁹ P. K. Ghosh, "The Chinese Concept of National Power: An Overview." In *AIR POWER Journal* Vol. 4, No. 4 (Winter 2009): 18-21. The concept of national power is not new. Many countries determine national power in different ways.

⁴⁰ AFDD 3-22, 29, and 19. Also William R. Meara, *Contra Cross: Insurgency and Tyranny in Central America*, 1979-1989. (Annapolis, Md: Naval Institute Press), 2006, 38-72.

- ⁴¹ Ibid and Lawrence M. Greenberg, *The Hukbalahap Insurrection: A Case Study of a Successful Anti-Insurgency Operation in the Philippines, 1946-1955.* (Washington, D.C: Analysis Branch, U.S. Army Center of Military History) 1987, 79-136. In an effort to de-escalate and influence the people who were in support of the Huk insurrection, the Philippine government stopped its terror tactics and sponsored the "Land for the Landless" program as a means to directly address the root grievances of the land-hungry supporters without resorting to violence. In both the Philippines and El Salvador, the initial response of security forces was arguably brutal however, not until the focus of government efforts shifted toward the hearts and minds of the people did real results begin to take place.
- ⁴² Michael J. Carden, *Trainers, Advisors Help Philippines Fight Terrorism*. U.S. Department of Defense. 22 Feb 2010. http://www.defense.gov/News/NewsArticle.aspx?ID=58031
 - ⁴³ JP 3-22, VI-38 and AFDD 3-22, 32.
- ⁴⁴ Mark. Smyth, "Aviation Economic Benefit." International Air Transportation Association. 2007, 32. Access to aviation stimulates higher productivity and greater GDP.
 - ⁴⁵ AFDD 3-22, 16-18.
 - ⁴⁶ AFDD 3-22, 16.
- ⁴⁷ Earl C. Hedges, *Costs In Support Of The Kabul Afghanistan Airport Infrastructure Improvement And Capacity Building Project Supported And Valid.* (U.S. Department of Transportation, 2011), 2.

http://www.oig.dot.gov/sites/dot/files/Kabul%20Audit%20Report_%204-6-11%20_0.pdf

⁴⁸ AFDD 3-22, 17-18.

⁴⁹ Ibid, 18.

⁵⁰ Heinrich Bofinger and Kenneth Gwilliam, *Airports and Air Transport: The Sky's the Limit*. (African Development Bank Group, 2010) Ch 13, 265. http://www.infrastructureafrica.org/library/doc/552/africa's-infrastructure-time-transformation

⁵¹ AFDD 3-22, 18.

⁵² Bofinger, 266.

⁵³ AFDD 3-22, 18.

⁵⁴ Bofinger, 265.

⁵⁵ AFDD 3-22, 18.

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<sup>56</sup> Ibid, 5.
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⁵⁷ Ibid, 33.

⁵⁸ JP 3-22, III-5.

⁵⁹ AFDD 3-22, 30.

⁶⁰Lt Col Norman J. Brozenick Jr., *Another Way to Fight: Combat Aviation Advisory Operations*. Unpublished paper. (Air University Air Force Fellows Program) 2002, 23 and AFDD 3-22, 33.

⁶¹ AFDD 3-22, 33.

⁶² Ibid.

⁶³ AFDD 3-22, 7 and 34 and 87.

⁶⁴ Ibid, 5.

⁶⁵ Ibid, 6.

⁶⁶ Ibid, 59-60 and Brozenick, 2002.

⁶⁷ Brozenick, 25-27 and AFDD 3-22, 32.

⁶⁸ AFDD 3-22, 25 and 39.

⁶⁹ Brozenick, 27.

⁷⁰ Che Guevara, *Guerrilla Warfare*, Third ed. Rev. by Brian Loveman and Thomas M. Davies, Jr. (Lincoln, NE: University of Nebraska Press, 1985), 61.

⁷¹ Corum and Johnson, 7-8.

⁷² David MacIsaac, "Voices from the Central Blue: The Air Power Theorists," in *Makers of Modern Strategy From Machiavelli to the Nuclear Age*, ed. Peter Paret (Princeton, NJ: Princeton University Press, 1986), 629-635. "The airplane possesses such ubiquity, and such advantages of speed and elevation, as to possess the power of destroying all surface installations and instruments, ashore or afloat, while remaining comparatively safe from any effective reprisal from the ground."

⁷³ FM 3-24/MCWP 3-33.5 Counterinsurgency, E-1.

⁷⁴ Vick. 11.

- ⁷⁵ Adm Eric T. Olson, *Campaign Plan for a Global War on Terror* (CONPLAN 7500), National Security Leaders Forum. (Washington, DC: Center for a New American Security), 2008. The indirect approach takes longer but ultimately will "create enduring success". The context of indirect approach here aligns best with B. H. Liddell Hart's definition, "In Strategy the longest way around is often the shortest way there. A direct approach to the object exhausts the attacker and hardens the resistance by compression, where as an indirect approach loosens the defender's hold by upsetting his balance."
- ⁷⁶ Andrew F. Krepinevich, *The Army and Vietnam*. (Baltimore: Johns Hopkins University Press), 1986, 10-11. The way to defeat an insurgency is to deny him access to the population. When distributed quickly, effectively, and equitably a holistic approach, such as IDAD, will deny such access. The argument is that air mobility has greater distribution powers than ISR.
- ⁷⁷ Guevara, 58. Guevara describes mobility using the analogy of a dance or a series of attacks and retreats delicately orchestrated to deplete conventional forces of ammunition and morale. He explicitly states that mobility is the fundamental characteristic of this type of engagement.
- ⁷⁸ Mao Tse-tung, *On Guerrilla Warfare*, by Samuel B. Griffith, USMC (Ret). (New York, NY: Praeger Publishers, 1961), 57.
- ⁷⁹ AFDD 3-22, 1. Phrases that relate to air power's characteristics of "speed, range, and flexibility" can be found in the sections of: principles of war, tenets of air and space power, and the Air Force Core Competencies.

⁸⁰ AFDD 3-22, 23.

⁸¹ Ibid.

⁸² Ibid.

⁸³ U.S. Fleet Forces Public Affairs, *U.S. Fleet Forces Commander Provides Update on Navy Contributions to Haiti Relief Efforts* (12 January 2010). http://www.navy.mil/submit/display.asp?story_id=50631

⁸⁴ American Forces Press Services, *Navy Choppers Provide Aid to Pakistani Flood Victims* (19 August 2010). http://www.defense.gov/News/NewsArticle.aspx?ID=60512

⁸⁵ AFDD 3-22, 23.

⁸⁶ Davidson, 40.

⁸⁷ AFDD 3-22, 23.

⁸⁸ Moulton, 8-9.

- ⁸⁹ AFDD 3-22, 24.
- ⁹⁰ Navy Marine Corps (NAVMC) 2890, Small Wars Manual, Reprint (Washington, D.C: Department of the Navy, 1987), 9-32-3.
 - ⁹¹ Small Wars Manual, 9-32-21.
- 92 FM 3-24/MCWP 3-33.5, $\it Counterinsurgency$, (Washington, D.C: Department of the Army, 2006), E-1.
 - ⁹³ Ibid.
 - ⁹⁴ Ibid and AFDD 3-22, 19.
- ⁹⁵ Bradley Graham. "Dangers on the Ground in Iraq Lead to Increased use of Airlifts." Washington Post. December 12, 2004. Eric Schmitt. "Cargo Flights Added to Cut Risky Land Trips." New York Times. December 15, 2004.
 - ⁹⁶ FM 3-24/MCWP 3-33.5, 8-9.
- ⁹⁷ Quoted words from MFR, Westmoreland, 28 Apr 65, sub: Conference With Generals Thieu and Minh, 28 April, History file 15-45. See also Msgs, Westmoreland MAC 5875 to Wheeler, 210905 Nov 65, and Westmoreland MAC 1463 to Wheeler, 171825 Mar 65, COMUSMACV Message file. All in Westmoreland Papers, HRB, CMH.
 - 98 Ibid.
 - ⁹⁹ Ibid.
- ¹⁰⁰ Circular no. 525-1, HQ, II FFV, 26 Jun 69, sub: Military Operations: Operation Dong Tien ("Progress Together") in SEAB, CMH. SEAB-Southeast Asia Branch, CMH- U.S. Army Center of Military History.
- ¹⁰¹ Richard Whittle. *The Dream Machine: The Untold History of the Notorious V-22 Osprey.* (New York: Simon & Schuster) 2010, 41. 3 CDO website http://www.royalnavy.mod.uk/The-Fleet/The-Royal-Marines/3-Commando-Brigade/History. In 1956, the assault on Port Said at Suez 3 Commando Brigade executed the world's first ever helicopter assault.
- ¹⁰² FM 1-02 [FM 101-5-1] *Operational Terms and Graphics*, (Washington, DC: Department of the Army, 2004), 17.
- ¹⁰³ Robert Haddick, "Colombia Can Teach Afghanistan (and the United States) How to Win," Air & Space Power Journal (Summer 2010). http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/sum10/08haddick.html

¹⁰⁴ Peter DeShazo, Johanna Mendelson Forman, and Phillip McLean, Countering Threats to Security and Stability in a Failing State: Lessons from Colombia (Washington, DC: Center for Strategic and International Studies, 2009), 22.

http://csis.org/files/publication/090930_DeShazo_CounteringThreats_Web.pdf

¹⁰⁵ Ibid.

¹⁰⁶ AFDD 3-22, 23.

¹⁰⁷ U.S. Fleet Forces Public Affairs, *U.S. Fleet Forces Commander Provides Update on Navy Contributions to Haiti Relief Efforts* (12 January 2010). Six days following the tragic earthquake in the island nation of Haiti, the U.S. Navy listed its assets in the area as 17 ships, 48 helicopters, and 12 fixed-wing aircraft. This emphasis on rotary-wing assets speaks volumes to the importance of its role in the aftermath of a destabilizing event.

Bibliography

- American Forces Press Services, *Navy Choppers Provide Aid to Pakistani Flood Victims* Emerging Media, Defense Media Activity, Washington: D.C., 19 August 2010. http://www.defense.gov/News/NewsArticle.aspx?ID=60512
- Bofinger, Heinrich, and Gwilliam, Kenneth. *Airports and Air Transport: The Sky's the Limit*. African Development Bank Group, 2010. http://www.infrastructureafrica.org/library/doc/552/africa's-infrastructure-time-transformation
- Bolkom, Christopher, and Kenneth Katzman. *Military Aviation: Issues and Options for Combating Terrorism and Insurgency*. CRS Report for Congress: RL32737. 2005.
- Bradley, Mark. Vietnam at war. Oxford. 1991.
- Brozenick, Norman J., Jr. *Another Way to Fight: Combat Aviation Advisory Operations*. Diss. Air Force Fellows Program. 2005. http://handle.dtic.mil/100.2/ADA420700
- Carden, Michael J.. *Trainers, Advisors Help Philippines Fight Terrorism*. U.S. Department of Defense. 22 Feb 2010. http://www.defense.gov/News/NewsArticle.aspx?ID=58031
- Chinh, Fall. *Primer for Revolt*. London: Frederick A. Praeger, 1963.
- Clarke, Jeffery J. *United States Army in Vietnam Advice and Support: The Final Years 1965 1973*. Washington, D.C.: The Center of Military History, 1988. http://www.history.army.mil/banner_images/focus/dr_clarke_ret_comm/the_final_years.pdf
- Collier, Paul, and Anke Hoeffler. *Greed and Grievance in Civil War*. The World Bank, Development Research Group, 2000. http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2000/06/17/000094946_00060205420011/Rendered/PDF/multi_page.pdf
- Corum, James S., and Wray R. Johnson. *Airpower in Small Wars: Fighting Insurgents and Terrorists*. Lawrence, KS: University Press of Kansas, 2003.
- Counterinsurgency. Washington, D.C: Headquarters, Dept. of the Army, 2006.
- Davidson, Phillip B. *Vietnam at War: The History, 1946-1975*. Novato, Calif: Presidio Press, 1988.
- Eizenstat, Stuart E.; John E. Porter; and Jeremy M. Weinstein. *On the Brink: Weak States and US National Security*. Center for Global Development, 2004. http://www.cgdev.org/doc/books/weakstates/Full_Report.pdf
- Eliason, William T. USAF Support to Low Intensity Conflict: Three Case Studies from the 1980s.

- Thesis. School of Advanced Aerospace Studies, Jun. 1994. 14 Feb. 2005, https://research.au.af.mil/papers/ay1994/saas/eliason.pdf
- Felbab-Brown, Vanda. *The Violent Drug Market in Mexico and Lessons from Colombia*. Policy Paper. Foreign Policy at Brookings, No. 12, March 2009. http://www.brookings.edu/~/media/research/files/papers/2009/3/mexico%20drug%20 market%20felbabbrown/03_mexico_drug_market_felbabbrown
- Finlayson, Col. USMC (ret) Andrew, *A Retrospective on Counterinsurgency Operations*, Working Paper, 2001.
- Ghosh, P.K. "The Chinese Concept of National Power: An Overview." *AIR POWER Journal* Vol. 4, No. 4 (Winter 2009): 17-54. http://www.aerospaceindia.org/Air%20Power%20Journals/Winter%202009/Chapter%202.pdf
- Gleason, Robert L. Air Commando Chronicles: Untold Tales from Vietnam, Latin America, and Back Again. Manhattan, KS: Sunflower University Press, 2000.
- Greenberg, Lawrence M. *The Hukbalahap Insurrection: A Case Study of a Successful Anti-Insurgency Operation in the Philippines, 1946-1955.* Washington, D.C: Analysis Branch, U.S. Army Center of Military History, 1987.
- Guevara, Che, Brian Loveman, and Thomas M. Davies. *Guerrilla Warfare*. Lincoln: University of Nebraska Press, 1985.
- Haddick, Robert. "Colombia Can Teach Afghanistan (and the United States) How to Win." In *Air & Space Power Journal*, June 01, 2010. http://www.airpower.maxwell.af.mil/airchronicles/apj/apj10/sum10/08haddick.html
- Hedges, Earl C., Costs In Support Of The Kabul Afghanistan Airport Infrastructure Improvement And Capacity Building Project Supported And Valid. U.S. Department of Transportation. 6 Apr 2011. http://www.oig.dot.gov/sites/dot/files/Kabul%20Audit%20Report_%204-6-11%20_0.pdf
- Johnson, Lt Col Wray R. "Ends Versus Means: The 6th Special Operations Squadron and the Icarus Syndrome." *Air & Space Power Journal*, 2000. http://www.airpower.au.af.mil/airchronicles/cc/wjohnson.html
- Johnson, Lt Col Wray R. "Whither Aviation Foreign Internal Defense?" *Airpower Journal* 11, no. 1 (Spring 1997): 66-86.
- Joint Chiefs of Staff, *National Military Strategy*. Washington, D.C., 2004. http://www.hsdl.org/?view&did=446695
- Joint Chiefs of Staff, *National Military Strategic Plan for the War on Terrorism*. Washington, D.C., 2006. http://www.hsdl.org/?view&did=459916

- Joint Publication 1-02. *DOD Dictionary of Military and Associated Terms*. 08 November 2010, as amended through 15 December 2012. http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf
- Joint Publication 3-22. *Joint Tactics, Techniques, and Procedures for Foreign Internal Defense (FID).* 12 July 2010.
- Kilcullen, David J. *Three Pillars of Counterinsurgency*. US Government Counterinsurgency Conference, Washington D.C., 2006. http://www.au.af.mil/au/awc/awcgate/uscoin/3pillars_of_counterinsurgency.pdf
- Koster, Maj Michael. Foreign Internal Defense: Does Air Force Special Operations Have What it Takes? Air University Press, 1993.
- Krepinevich, Andrew F. *The Army and Vietnam*. Baltimore: Johns Hopkins University Press, 1986.
- Lambert, Geoffrey, Larry Lewis, and Sarah Sewall. "Operation Enduring Freedom—Philippines Civilian Harm and the Indirect Approach." In Prism 3, No. 4. Washington, D.C.: Department of Defense, N.D., 116-135.
- MacIsaac, David. "Voices from the Central Blue: The Air Power Theorists." In *Makers of Modern Strategy: From Machiavelli to the Nuclear Age*. Edited by Peter Paret. Princeton, NJ: Princeton University Press, 1986.
- Mao, Zedong. On Guerrilla Warfare. New York: Praeger, 1961.
- Marston, Daniel, and Carter Malkasian. *Counterinsurgency in Modern Warfare*. Oxford: Osprey, 2008.
- Mason, Robert. Chickenhawk. New York: Viking Press, 1983.
- Meara, William R. *Contra Cross: Insurgency and Tyranny in Central America*, 1979-1989. Annapolis, Md: Naval Institute Press, 2006.
- Metzgar, Maj Greg E. *Unconventional Warfare: A Mission Metamorphosis for the 21st Century?* Master's thesis, School of Advanced Air Power Studies, Maxwell AFB, AL, June 2000.
 - http://dtlweb.au.af.mil///exlibris/dtl/d3_1/apache_media/L2V4bGlicmlzL2R0bC9kM18x L2FwYWNoZV9tZWRpYS8yNzg5Mw==.pdf
- Military Assistance Command, Vietnam (MAC-V), *History of the U.S. Air Force Advisory Group*, 1 July 30 September 1970, Volume One of Five. Microfilm K712.011-1, USAF Historical Research Agency.
- National Commission on Terrorist Attacks Upon the United States. *The 9/11 Commission Report*. Washington D.C.: Government Printing Office, 2004. http://www.9-

- 11commission.gov/report/911Report.pdf
- *National Strategy for Combating Terrorism*. Washington, D.C.: The White House, September 2006. http://georgewbush-whitehouse.archives.gov/nsc/nsct/2006/
- Navy Marine Corps (NAVMC) 2890. Small Wars Manual, 1940. Reprint, Washington, D.C: Department of the Navy, 1987.
- Olson, Eric T. *Campaign Plan for a Global War on Terror* (CONPLAN 7500), National Security Leaders Forum. Washington, DC: Center for a New American Security, 2008. http://www.cnas.org/files/multimedia/documents/AdmOlson_CNAS_Transcript.pdf
- *Operational Terms and Graphics*. Washington, D.C: Headquarters, Dept. of the Army, 2004. http://www.scribd.com/doc/2513344/Army-FM1-02-Operational-Terms-and-Graphics
- Report by the Commission on Weak States and US National Security, 8 June 2004, 76. On-line. Internet, 24 February 2005. Available from http://www.cgdev.org/doc/weakstates/WeakState_Transcript_rev.pdf
- Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations*. The Pennsylvania State University, 2005. http://www2.hn.psu.edu/faculty/jmanis/adam-smith/wealth-nations.pdf
- Smyth, Mark. "Aviation Economic Benefit." International Air Transportation Association. Jul 2007. http://www.iata.org/whatwedo/Documents/economics/aviation_economic_benefits.pdf
- Strategy to Combat Transnational Organized Crime. Washington, D.C.: The White House, July 2011. http://www.hsdl.org/?view&did=682263
- The National Security Strategy of the United States of America. Washington, D.C.: The White House, May 2010. http://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf
- United States Air Force (USAF). Foreign Internal Defense: Air Force Doctrine Document 3-22 with Interim Change Two. Washington: GPO, 2011. http://www.fas.org/irp/doddir/usaf/afdd3-22.pdf
- U.S. Department of Defense, *RW SFA (Rotary Wing Security Force Assistance): NSRWA Steering Committee.* Briefing Slides, Pentagon, Washington, DC, Non-standard Rotary Wing Aviation Steering Committee, December 6, 2011.
- US Department of Defense. *The National Defense Strategy of the United States of America*. Washington, D.C.: Office of the Secretary of Defense, 2008. http://media.washingtonpost.com/wp-srv/politics/documents/national_defense_strategy_073108.pdf

- US Fleet Forces, U.S. Fleet Forces Commander Provides Update on Navy Contributions to Haiti Relief Efforts. Norfolk, VA: Public Affairs Office, 2010. http://www.navy.mil/submit/display.asp?story_id=50631
- US House. *Denying Terrorists Sanctuary: Hearings before the Committee on Armed Services*. Statement of Assistant Secretary of Defense Paul Wolfowitz. 108th Cong., 2nd sess., 10 August 2004. http://www.dod.mil/dodgc/olc/docs/test04-08-10Wolfowitz.pdf
- US House. Eliminating Terrorist Sanctuaries: Hearings before the Subcommittee on International Terrorism and Nonproliferation of the Committee on International Relations. Statement of Rear Adm Hamlin B. Tallent. 109th Cong., 1st sess., 10 March 2005. http://www.gpo.gov/fdsys/pkg/CHRG-109hhrg99825/pdf/CHRG-109hhrg99825.pdf
- Vick, Alan, David T. Orletsky, Abram N. Shulsky, and John Stillion, *Preparing the US Air Force for Military Operations Other Than War.* RAND, 1997.
- Watkins, Eric E., Valentine J. Dugie, and Gary H. Laughlin, *USAF Concepts Building Partnerships through Aviation Enterprise Development*. Briefing Slides, Pentagon, Washington, DC, U.S. Department of State, September 28, 2011.
- Whittle, Richard. *The Dream Machine: The Untold History of the Notorious V-22 Osprey*. New York: Simon & Schuster, 2010. http://books.google.co.uk/books?id=_9Asc0bgm_ cC&printsec=frontcover#v=onepage&q&f=false.